

PHX 1 (150W), PHX 2 (250W)

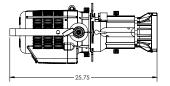
SUMMARY

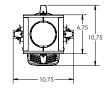
The 5°, 10°, 19°, 26°, 36° and 50° fixed focus PHX LED ellipsoidals are state of the art luminaires in function, style, and efficiency. These ellipsoidals have been designed and engineered with a number of innovative details and features enhancing versatility and efficiency without sacrificing performance.

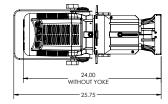
A diverse line of LED choices are available in both 150 watt and 250 watt RGBA, RGBW, 3000k and 5600k versions.

Fully locking shutters and a 360° rotating barrel help keep your keep the artistic part of your fixtures focus intact and easy to attain, and with virtually no light leak from the fixture itself you wont have to worry about any extra light illuminating unwanted parts of the ceiling. The aesthetic appearance and ergonomically designed function controls only add to the appeal.

These new and innovative options are what makes the PHX LED ellipsoidals ideal for theatres, Special Events, television studios, or wherever superior, energy efficient lighting performance is required.

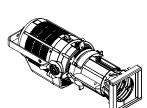














FEATURES

- 360 degree rotating barrel
- **Locking Shutters**
- Completely enclosed accessory holder
- Heat resistant Plano-Convex lensing
- Die cast aluminum and sheet metal fabrication
- Color frame and safety cable included
- Carries three year standard Altman Warranty
- Tool free interchangeable barrels
- 5 foot powerCON® power cable included
- C-clamp included with fixture
- 26.5 lbs. (12kgs)
- ETL and cETL listed
- Made in the USA



SPECIFICATIONS

GENERAL

- 60 LED Array
- ETL listed to UL1573
- IP20 rated for indoor use
- powerCON and DMX in/thru for easy connections
- User friendly control interface with multiple modes in fixture settings

PHYSICAL

- Rugged die-cast, all metal housing
- Available standard in Black, White or Silver with Custom Colors available
- C-clamp included
- Color frame and spring clip safety cable included
- Positive locking double-clutch fixture body
- Pattern slot fits glass or steel gobos
- Wide accessory slot with sliding cover for motorized patter devices or optional iris
- Yoke made from rigid flat steel with dual locking handles, two mounting positions and indexed tilt angle markings

ELECTRICAL

- 100-240VAC, 50/60HZ Universal power input
- powerCON® in/thru
- Up to 8 fixtures (20A Max) may be linked via powerCON®
- Requires power from Non-Dim source

CONTROL

- DMX512 in/thru via 5-pin XLR connector
- Multiple on-board control options: RGB(A/W) color fades and strobes
- Console free Master/Slave mode
- 8-bit or 16-bit virtual dimming engine provides smooth, high quality fades and minimizes color shift during dimming
- RDM capable for addressing and setting changes

ENVIRONMENTAL

- Ambient operating temperature of -14°F to 104°F (-10°C to 40°C)
- Near silent fan cooling
- Fixture is designed for continuous operation up to 104°F (40°C) - ambient temperature requires free flow of air around fixture housing
- 853 BTUs





ORDERING GUIDE

Fixture	Wattage		LED Array		Lens Type		Finish Color
PHX	1(150)	-	RGBA	-	5°	-	B (Black)
	2(250)	-	RGBW	-	10°	-	W (White)
		-	3K	-	19°	-	S (Silver)
		-	5K	-	26°	-	C (Custom)
				-	36°		
				-	50°		

Example: PHX2-RGBA-36-B

Included Accessories			
6-CFD	Black Color Frame, 6¼" x 6¼"		
510	Malleable Iron Pipe Clamp		
SC-36-BK 36" Black Safety Cable with			
Spring Clamp			

Additional Access	Additional Accessories			
10-CFB	Black Color Frame, 12" x 12" (Included with PHX-10 and C10)			
12-CFB	Black Color Frame, 14" x 14" (Included with PHX-5 and C5)			
510-HD	Heavy Duty Malleable Iron Pipe Clamp			
4.5-DN	6¼" x 6¼" Donut [,] Black with 2½" Hole			
10-DN	12" x 12" Donut, Black			
12-DN	14" x 14" Donut, Black			
4.5-SN	6¼" x 6¼" Snoot, Black			
10-SN	12" x 12" Snoot, Black			
12-SN	14" x 14" Snoot, Black			
PHX-PH	Phoenix Steel Pattern Holder, B-Size			
PHX-GPH	Phoenix Glass Patter Holder, B-Size			
PDII	Phoenix Drop In Iris			
PCL-PBG-12-*	5' 20A powerCON with Parallel Blade U Ground (Edison)			
PCL-2P&G-12-5-*	5' 20A powerCON with 2P&G Stage Pin Connector, Male			
PCL-TLG-12-5-*	5' 20A powerCON with L5-20P Twist Locking Ground Connector, Male			
PCL-BARE-12-5-*	5' 20A powerCON with Bare End Lead			



 $^*=W$ for White Cable, Black is standard and no suffix is required



RGBA PERFORMANCE

5 Degree

Throw Distance (d)	4' 1.2m	6' 1.8m	8' 2.4m	10′ 3m
Beam Size (H x V)	0.5' x 0.5' 0.15m x 0.15m	0.7' x 0.7' 0.21m x 0.21m	0.9' x 0.9' 0.27m x 0.27m	1.1'x 1.1' 0.34m x 0.34m
Illuminance (fc)	18,867	8,386	4,717	3,019
Illuminance (lux)	203,082	90,0266	50,773	32,496

10 Degree

Throw Distance (d)	4' 1.2m	6' 1.8m	8' 2.4m	10' 3m
Beam Size (H x V)	0.6' x 0.6' 0.18m x 0.18m	0.9' x 0.9' 0.27m x 0.27m	1.2' x 1.2' 0.37m x 0.37m	1.5' x 1.5' 0.46m x 0.46m
Illuminance (fc)	11,377	5,056	2,844	1,820
Illuminance (lux)	122,461	54,422	30,612	19,590

19 Degree

Throw Distance	4'	6'	8'	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.2' x 1.2'	1.9' x 1.9'	2.5' x 2.5'	3.1' x 3.1'
x V)	0.37m x 0.37m	0.58m x 0.58m	0.76m x 0.76m	0.94m x 0.94m
Illuminance (fc)	3,067	1,363	767	491
Illuminance (lux)	33,013	14,671	8,256	5,285

26 Degree

Throw Distance	4'	6'	8'	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.7' x 1.7'	2.6' x 2.6'	3.5' x 3.5'	4.4′ x 4.4′
x V)	0.52m x 0.52m	0.8m x 0.8m	1.1m x 1.1m	1.3m x 1.3m
Illuminance (fc)	1,563	695	391	250
Illuminance (lux)	16,824	7,481	4,209	2,691

36 Degree

Throw Distance	4'	6'	8′	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	2.5' x 2.5'	3.7' x 3.7'	5.0' x 5.0'	6.3' x 6.3'
x V)	0.76m x 0.76m	1.1m x 1.1m	1.5m x 1.5m	2.0m x 2.0m
Illuminance (fc)	977	434	244	156
Illuminance (lux)	10,516	4,672	2,626	1,679

Throw Distance	4'	6'	8′	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	3.0' x 3.0'	4.5' x 4.5'	5.9' x 5.9'	7.4′ x 7.4′
x V)	0.9m x 0.9m	1.4m x 1.4m	1.8m x 1.8m	2.3m x 2.3m
Illuminance (fc)	549	244	137	88
Illuminance (lux)	5,909	2,626	1,475	947





RGBW PERFORMANCE

5 Degree

Throw Distance (d)	4' 1.2m	6' 1.8m	8' 2.4m	10' 3m
Beam Size (H x V)	0.5' x 0.5' 0.15m x 0.15m	0.7' x 0.7' 0.21m x 0.21m	1.0' x 1.0' 0.3m x 0.3m	1.2' x 1.2' 0.37m x 0.37m
Illuminance (fc)	27,784	12,348	6,946	4,445
Illuminance (lux)	299,064	132,913	74,766	47,846

10 Degree

Throw Distance (d)	4' 1.2m	6' 1.8m	8' 2.4m	10' 3m
Beam Size (H x V)	0.6' x 0.6' 0.18m x 0.18m	0.9' x 0.9' 0.27m x 0.27m	1.2' x 1.2' 0.37m x 0.37m	1.5' x 1.5' 0.46m x 0.46m
Illuminance (fc)	15,743	6,997	3,936	2,519
Illuminance (lux)	169,456	75,315	42,367	27,114

19 Degree

Throw Distance	4'	6'	8'	10'
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.2' x 1.2'	1.9' x 1.9'	2.5' x 2.5'	3.1' x 3.1'
x V)	0.37m x 0.37m	0.58m x 0.58m	0.76m x 0.76m	0.94m x 0.94m
Illuminance (fc)	4,242	1,886	1,061	679
Illuminance (lux)	45,661	20,301	11,421	7,309

26 Degree

Throw Distance	4'	6'	8'	10'
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.7' x 1.7'	2.6' x 2.6'	3.5' x 3.5'	4.4' x 4.4'
x V)	0.52m x 0.52m	0.8m x 0.8m	1.1m x 1.1m	1.3m x 1.3m
Illuminance (fc)	2,210	982	553	354
Illuminance (lux)	23,788	10,570	5,952	3,810

36 Degree

Throw Distance	4'	6'	8'	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	2.4' x 2.4'	3.6' x 3.6'	4.9' x 4.9'	6.1' x 6.1'
x V)	0.73m x 0.73m	1.1m x 1.1m	1.5m x 1.5m	1.9m x 1.9m
Illuminance (fc)	1,345	598	336	215
Illuminance (lux)	14,477	6,437	3,617	2,314

Throw Distance	4'	6'	8′	10'
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	3.0' x 3.0'	4.5' x 4.5'	6.0' x 6.0'	7.5' x 7.5'
x V)	0.9m x 0.9m	1.4m x 1.4m	1.8m x 1.8m	2.3m x 2.3m
Illuminance (fc)	749	333	187	120
Illuminance (lux)	8,062	3,584	2,013	1,292





3000K PERFORMANCE

250W 3000K CRI: 92

5 Degree

Throw Distance (d)	4' 1.2m	6' 1.8m	8' 2.4m	10′ 3m
Beam Size (H x V)	0.5' x 0.5' 0.15m x 0.15m	0.7' x 0.7' 0.21m x 0.21m	1.0' x 1.0' 0.3m x 0.3m	1.2' x 1.2' 0.37m x 0.37m
Illuminance (fc)	41,432	18,414	10,358	6,629
Illuminance (lux)	445,970	198,207	111,493	71,354

10 Degree

Throw Distance (d)	4' 1.2m	6' 1.8m	8' 2.4m	10' 3m
Beam Size (H x V)	0.7' x 0.7' 0.21m x 0.21m	1.0' x 1.0' 0.3m x 0.3m	1.4' x 1.4' 0.43m x 0.43m	1.7' x 1.7' 0.52m x 0.52m
Illuminance (fc)	20,670	9,187	5,168	3,307
Illuminance (lux)	222,490	98,888	55,628	35,596

19 Degree

Throw Distance	4'	6'	8'	10'
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.2' x 1.2'	1.9' x 1.9'	2.5' x 2.5'	3.1' x 3.1'
x V)	0.37m x 0.37m	0.58m x 0.58m	0.76m x 0.76m	0.94m x 0.94m
Illuminance (fc)	6,313	2,806	1,578	1,010
Illuminance (lux)	67,953	30,204	16,985	10,872

26 Degree

Throw Distance	4'	6'	8'	10'
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.7' x 1.7'	2.6' x 2.6'	3.5' x 3.5'	4.4' x 4.4'
x V)	0.52m x 0.52m	0.8m x 0.8m	1.1m x 1.1m	1.3m x 1.3m
Illuminance (fc)	3,218	1,430	805	515
Illuminance (lux)	34,638	15,392	8,643	5,543

36 Degree

Throw Distance	4'	6'	8′	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	2.4' x 2.4'	3.6' x 3.6'	4.8' x 4.8'	5.9′ x 5.9′
x V)	0.73m x 0.73m	1.1m x 1.1m	1.5m x 1.5m	1.8m x 1.8m
Illuminance (fc)	2,002	890	501	320
Illuminance (lux)	21,549	9,580	5,393	3,444

Throw Distance	4'	6'	8′	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	3.0' x 3.0'	4.4' x 4.4'	5.9' x 5.9'	7.4′ x 7.4′
x V)	0.9m x 0.9m	1.3m x 1.3m	1.8m x 1.8m	2.3m x 2.3m
Illuminance (fc)	1,161	516	290	186
Illuminance (lux)	12,497	5,554	3,121	2,002





5600K PERFORMANCE

250W 5600K CRI: 92

5 Degree

Throw Distance	4'	6'	8'	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	0.5' x 0.5'	0.7' x 0.7'	1.0' x 1.0'	1.2' x 1.2'
x V)	0.15m x 0.15m	0.21m x 0.21m	0.3m x 0.3m	0.37m x 0.37m
Illuminance (fc)	44,206	19,547	11,052	7,073
Illuminance (lux)	475,829	210,402	118,963	76,133

10 Degree

Throw Distance (d)	4' 1.2m	6' 1.8m	8' 2.4m	10' 3m
Beam Size (H x V)	0.6' x 0.6' 0.18m x 0.18m	0.9' x 0.9' 0.27m x 0.27m	1.2' x 1.2' 0.37m x 0.37m	1.5' x 1.5' 0.46m x 0.46m
Illuminance (fc)	29,107	12,937	7,277	4,657
Illuminance (lux)	313,305	139,253	78,329	50,128

19 Degree

Throw Distance	4'	6'	8'	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.2' x 1.2'	1.8' x 1.8'	2.4' x 2.4'	3.0' x 3.0'
x V)	0.37m x 0.37m	0.55m x 0.55m	0.73m x 0.73m	0.91m x 0.91m
Illuminance (fc)	7,926	3,523	1,982	1,268
Illuminance (lux)	85,315	37,921	21,334	13,649

26 Degree

Throw Distance	4'	6'	8'	10'
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	1.7' x 1.7'	2.6' x 2.6'	3.5' x 3.5'	4.4' x 4.4'
x V)	0.52m x 0.52m	0.8m x 0.8m	1.1m x 1.1m	1.3m x 1.3m
Illuminance (fc)	4,060	1,804	1,015	650
Illuminance (lux)	43,701	19,418	10,925	6,997

36 Degree

Throw Distance	4'	6'	8'	10′
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	2.4' x 2.4'	3.6' x 3.6'	4.7′ x 4.7′	5.9' x 5.9'
x V)	0.73m x 0.73m	1.1m x 1.1m	1.4m x 1.4m	1.8m x 1.8m
Illuminance (fc)	2,526	1,123	632	404
Illuminance (lux)	27,190	12,088	6,803	4,349

Throw Distance	4'	6'	8′	10'
(d)	1.2m	1.8m	2.4m	3m
Beam Size (H	3.0' x 3.0'	4.5' x 4.5'	6.0' x 6.0'	7.4′ x 7.4′
x V)	0.9m x 0.9m	1.4m x 1.4m	1.8m x 1.8m	2.3m x 2.3m
Illuminance (fc)	1,424	633	356	228
Illuminance (lux)	15,328	6,814	3,832	2,454





SPECIFICATION

1.01 PHX LED Profile Spotlight

A. General

1) The fixture shall be a PHX LED Profile Spotlight by Altman Lighting, Inc., or approved equal.

B. Physical

- 1) The fixture shall be constructed of die cast aluminum free of defects such as burrs, pits and malformations. Normal operation of the fixture shall not require tools.
- 2) The fixture shall be a 250-watt LED Profile Spotlight available with a Multi-LED array. LED arrays shall be available in Color Mixing (RGBA or RGBW) and specific color temperature (3000K or 5600K).
- 3) The unit shall have four tool free heavy gauge stainless steel shutters equipped with oversized insulated handles.
- 4) Fixture shall be provided with an interchangeable tool free lens barrel (19, 26, 36 or 50 degree).
- 5) The heat resisting 4.5" plano-convex lenses for 19, 26, 36, & 50-degree shall be housed in an adjustable die-cast lens tube complete with insulated locking knob for beam definition.
- 6) Lens tubes shall incorporate a fully enclosed color filter and front accessory holder with locking accessory slot cover. Fixtures not including this feature will not be acceptable.
- 7) Fixture shall incorporate lockable, 360-degree rotation of the shutter assembly and lens barrel. Fixtures not offering 360 degree rotation shall not be acceptable.
- 8) Accessory slot shall be provided with locking cover and will accept rotating gobo accessories, glass pattern holder and drop-in iris.
- 9) Fixture shall include a lever located on each side to facilitate locking the shutters into position. Fixtures not including this option will not be acceptable.
- 10) Fixture shall be supplied with a cast iron C-clamp (Altman #510) suitable for use on up to 2" O.D. pipe. Clamp must incorporate a 360-degree rotational "Safety Stud" with locking bolt. Any clamp not offering this safety feature will not be acceptable.
- 11) Fixture shall be supplied with an 18 inch safety cable.
- 12) Fixture shall be supplied with a color frame.
- 13) Finish shall be Epoxy Sandtex black, electrostatic application.





SPECIFICATION

C. Electrical

- 1) The fixture shall comply with USITT DMX-512 A. DMX Control shall be connected via 5-Pin XLR input and output connectors. The DMX-512A device address for each fixture shall be user selectable.
- 2) Control of the fixture's intensity and color shall be available in user selectable 8-bit and 16-bit modes for full range high-resolution dimming. System shall provide full range (0-100%) dimming without exhibiting flicker or stepping. Dimming curves shall be optimized for smooth dimming at low intensities and over longer timed fades.
- 3) The fixture shall be ETL and cETL LISTED, and shall be so labeled when delivered to the job site. The fixture shall be ETL LISTED under Portable Electric Luminaires (UL Standard 153) and Surface Mount Luminaires (UL Standard 1598).
- 4) The fixture shall be equipped with 100V to 240V 50/60 Hz internal power supply
- 5) Manufacturer of LED systems shall utilize an advanced production LED binning process to maintain color consistency.
- 6) LED emitters should be rated for nominal 50,000 hour LED life
- 7) Color changing fixtures shall be optimized for low saturate colors (pastels) as well as high saturate colors used in theatrical applications. Fixtures utilizing 3-color (Red, Green, and Blue) mixing systems cannot produce sufficient skin tones or saturate ambers, lavenders, or oranges and shall not be accepted.

